## **Subsetting a Matrix**

Matrices can be subsetted in the usual way with (i,j) type indices.

```
> x <- matrix(1:6, 2, 3)
> x[1, 2]
[1] 3
> x[2, 1]
[1] 2
```

Indices can also be missing.

```
> x[1, ]
[1] 1 3 5
> x[, 2]
[1] 3 4
```

## **Subsetting a Matrix**

By default, when a single element of a matrix is retrieved, it is returned as a vector of length 1 rather than a  $1 \times 1$  matrix. This behavior can be turned off by setting drop = FALSE.

```
> x <- matrix(1:6, 2, 3)
> x[1, 2]
[1] 3
> x[1, 2, drop = FALSE]
        [,1]
[1,] 3
```

## **Subsetting a Matrix**

Similarly, subsetting a single column or a single row will give you a vector, not a matrix (by default).

```
> x <- matrix(1:6, 2, 3)
> x[1, ]
[1] 1 3 5
> x[1, , drop = FALSE]
       [,1] [,2] [,3]
[1,] 1 3 5
```